

What is claimed:

1. A tool assembly for insertion into a tool holder having a planar forward surface and a transverse mounting hole having an inner diameter, said tool assembly comprising in combination

a tool having a tapered forward cutting end, a radial flange aligned axially behind said forward cutting end, a cylindrical shank aligned axially behind said radial flange, and said cylindrical shank having an outer diameter less than said inner diameter of said transverse hole,

a retainer sleeve around said cylindrical shank for retaining said shank in said cylindrical hole,

a washer having an inner annular surface, a forward surface and a rearward surface, said inner annular surface having a diameter greater than that of said shank,

a layer of compressible material bonded to said inner annular surface,

said retainer sleeve fitted around a circumference of said shank, and

said washer fitted around said shank and said retainer sleeve,

wherein said layer of compressible material will retain said washer on said shank.

2. The tool assembly of claim 1 wherein on inner surface of said compressible material has a diameter less than said inner diameter of said transverse mounting hole.

3. The tool assembly of claim 1 wherein said layer of compressible material is an annular elastomeric member bonded to said inner annular surface.

4. An assembly for retaining a tool in a tool holder comprising
a tool holder having a transverse cylindrical hole with a longitudinal axis
and an inner diameter,
said holder having a planar forward surface perpendicular to said axis,
means for retaining said tool holder to a machine,
a tool having a tapered forward cutting end, a radial flange axially aligned
behind said forward cutting end, a cylindrical shank axially aligned behind said
radial flange, and said cylindrical shank having an outer diameter less than said
inner diameter of said transverse hole,
a retainer sleeve around said cylindrical shank for retaining said shank in
said cylindrical hole,
a washer having an inner diameter, a forward surface and a rearward
surface,
said retainer sleeve fitted around a portion of said shank,
said washer fitted around said shank and around said retainer sleeve,
said shank and said retainer sleeve fitted into said transverse hole, and
an annular elastomeric member having an inner surface and an outer
surface, said inner surface of said annular elastomeric member fitted around said
retainer sleeve and said outer surface of said annular elastomeric member

bonded to said inner surface of said washer whereby said washer is retained against rotation with said tool.

5. The tool assembly in accordance with claim 4 wherein said cylindrical hole has a frustoconical counter sink and said annular elastomeric member is seated in said frustoconical counter sink.

6. A tool assembly in accordance with claim 4 wherein said tool holder has a tungsten carbide wear ring.

7. The tool assembly of claim 4 wherein said inner surface of said annular elastomeric member has a diameter less than said inner diameter of said transverse mounting hole.

8. The tool assembly of claim 4 wherein said tool holder is made from alloy steel.

9. The tool assembly of claim 4 wherein said annular elastomeric member has an outer diameter greater than a diameter of said transverse cylindrical hole.

10. In an assembly for retaining a tool in a tool holder having a tool holder having a transverse cylindrical hole with a longitudinal axis and an inner diameter,

said holder having a planar forward surface perpendicular to said axis,
means for retaining said tool holder to a machine,
a tool having a tapered forward cutting end, a radial flange axially aligned behind said forward cutting end, a cylindrical shank axially aligned behind said radial flange, and said cylindrical shank having an outer diameter less than said inner diameter of said transverse hole,
a retainer sleeve around said cylindrical shank for retaining said shank in said cylindrical hole,
a washer having an inner diameter, a forward surface and a rearward surface,
said retainer sleeve fitted around a portion of said shank,
said washer fitted around said shank and around said retainer sleeve, and
said shank and said retainer sleeve fitted into said transverse hole, the improvement comprising
an annular elastomeric member having an inner surface and an outer surface, said inner surface of said annular elastomeric member fitted around said retainer sleeve and said outer surface of said annular elastomeric member bonded to said inner surface of said washer whereby said washer is retained against rotation with said tool.

11. The improvement of claim 10 wherein said cylindrical hole has a frustoconical counter sink and said annular elastomeric member is seated in said frustoconical counter sink.

12. The improvement of claim 10 wherein said tool holder has a tungsten carbide wear ring.

13. The improvement of claim 10 wherein said inner surface of said annular elastomeric member has a diameter less than said inner diameter of said transverse mounting hole.

14. The tool assembly of claim 10 wherein said tool holder is made from alloy steel.

15. The tool assembly of claim 10 wherein said annular elastomeric member has an outer diameter greater than a diameter of said transverse cylindrical hole.